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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/623,780	09/08/2000	Keiji Fukuzawa	450101-02221	7982
20999 7590 05/18/2007 FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER RAMAN, USHA	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/623,780

Applicant(s)

FUKUZAWA ET AL.

Examiner

Usha Raman

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,9-12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,9-12 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3-26-07
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 11th, 2007 has been entered.

Response to Arguments

2. Applicant's arguments filed January 11th, 2007 have been fully considered but they are not persuasive.

Applicant's amended claims remain generally unclear because it is not understood, how or why a service list descriptor is repeatedly appended to a transport stream, when a service list descriptor identifies services of a transport stream (and hence transmitted once per transport_stream_id, in accordance with the DVB specification, which applicant's disclosure is based on). Furthermore, applicant argues that, "DVB in table 65 on page 55 provides a set amount of bits for three types of tags per stream identifier descriptor" and therefore, "has no disclosure of appending descriptors to a stream identifier to identify transmission accordingly" have been noted, however appear to be irrelevant within the context of the claim. Accordingly further clarification regarding the recited claim matter is requested. The claim has been best understood as 'the service list descriptors for services repeated in the new transmission in the cable delivery network in accordance with the TS

description length' and examined accordingly. Applicant's claim recites appending a service list descriptor to a transport stream id (which is done so in the NIT, second 'for' loop that is executed for each transport stream ID, see DVB Guideline section 4.2.1), and not appending the service list descriptor to a stream identifier descriptor. Accordingly the rejection is maintained.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 7 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitations recited in Claims 7 and 12, "wherein service list descriptor repeated appended to a transport stream identifier in accordance with the length of a transport stream for identifying a new or previous transmission is" render the claim indefinite. It is not understood, how or why a service list descriptor is repeatedly appended to a transport stream, when a service list descriptor identifies services of a transport stream (and hence transmitted once per transport_stream_id, in accordance with the DVB specification, which applicant's disclosure is based on). The claim has been best understood as 'the service list descriptors for services

repeated in the new transmission in the cable delivery network in accordance with the TS description length' and examined accordingly.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 9-12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over LaJoie (US PG Pub. 2005/0015804) in view of "DVB Document A038: Specification for service information (SI) in Digital Video Broadcasting (DVB) Systems" to DVB Project office in March 1998.

With regards to claims 7 and 12, LaJoie discloses a method of transmitting digital services received from one delivery network (satellite transmission), demodulating the received satellite signals, editing the signal to remove streams that are not going to be re-broadcast, modulating the signals according to the cable delivery network modulation scheme and transmitting over the cable network. See [0071].

LaJoie is silent on the steps of replacing network information means prior to transmitting the data to a cable delivery network and deleting the service identifiers of network information that are not retransmitted (however note that, LaJoie does teach the step of not retransmitting certain services or "unwanted" programs), and adding placeholder data for the deleted service identifiers, the service list descriptors

for services repeated in the new transmission in the cable delivery network in accordance with the TS description length.

DVB specification (A038) as set forth by the DVB project office, further incorporating the contents of DVB guidelines for Implementation and usage of Service Information (ETR 211), set forth transition guidelines at delivery media boundaries. The guideline discloses replacement NIT packets and therefore shows the step of network information replacement with the information for the cable transmission path. See DVB Guidelines, ETR211: clauses 4.1.1 and 5.3.

Furthermore, the DVB specification discloses that the NIT comprises a `delivery_system_descriptor` for each of the delivery systems, namely a `cable_delivery_system_descriptor` and a `satellite_delivery_system_descriptor` for the cable and satellite systems respectively. See clauses 6.2.8 in DVB Specification, A038. It is noted that the length of both, the cable and satellite delivery system descriptors are 104 bits and therefore both have equal length. See DVB Specification, tables 22 and 26. The DVB specification further discloses the step of transmitting `stuffing_descriptor` (i.e. placeholder data) for invalidating previously coded descriptors and therefore teaches the step of replacing service identifiers using placeholder when the services are no longer valid. See DVB Specification, clause 6.2.29. The DVB Guideline further discloses that transmitting a service list descriptor corresponding to a transport stream identifiers, wherein the service list descriptor contains a list of services transmitted (including repeated services) in a new delivery system (see DVB Guidelines, fig. 2, 4.2.1.2.2 and DVB specification,

table 62), wherein the service list descriptor is transmitted in accordance with the length of a transport stream.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the principles taught set forth by the DVB specification for transition between delivery system boundaries in the system of LaJoie so that the receiver at the new delivery information can correctly identify and decode services.

In regards to claims 10 and 15, as discussed above for claims 7 and 12, the modified system comprises a cable television network as the first transmission path and a satellite broadcasting network as the second transmission path. See LaJoie [0071].

In regards to claims 9 and 14, LaJoie discloses that a satellite decoder demodulates the QPSK signals modulated from the second network transmission path and data packets. Note LaJoie [0071]. Upon receiving and decoding a transport stream, the NIT is extracted at the receiving site in order compare the network id of a transport stream to identify the delivery network. If it is found that the network id of the received transport stream does not match with the network id of the receiver, the network id must be replaced for subsequent delivery over a second network. The extracted packets are then packetized (converted) into a compliant system standard for subsequent delivery in the second network. Furthermore, the ETR discloses that the extracted network identification information is replaced with that of the new network. Note clause 5.3.2 in page 37 of the ETR.

In regards to claims 11 and 16, the ETR discloses that a can digital receive transport streams from an arbitrary network, extract the network information to determine the delivery network id and convert it to a format compliant with the network to be delivered to, replace the network id with the information of the network to be delivered to. In the case of the modified system, the arbitrary network is any satellite network and the network to be delivered to is the cable network. The ETR further discloses that a transport stream from an arbitrary network has to have a NIT (designated by the tables listed under DVB mandatory in figure 1) identifying the actual transport stream, however it may also have NIT concerning with another transport stream (designated by tables under DVB for optional transport streams) of another network (i.e. another satellite, cable or terrestrial network). Note clause 1 in page 7 and figure 1 of ETR in page 10. When two such networks are identified in the new network, the new network replaces the network information of both the networks with the network information of the new network in the same manner as above. Note the last paragraph in page 11 of the ETR.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UR



SCOTT E. BELIVEAU
PRIMARY PATENT EXAMINER